

2.0 FORT RICHARDSON

Introduction

Archaeological and cultural resources inventories for training range firing fans were the primary focus of archaeological work at Fort Richardson in 2003. These ranges include a multi-purpose training range located in the northeastern section of Fort Richardson an Infantry Platoon Battle Course (IPBC) located to the south of the Military Operations in Urban Terrain (MOUT) range located on the western portion of Fort Richardson; and an Infantry Squad Battle Course (ISBC), in the southeastern section of Fort Richardson. The areas of potential effect for the firing fans (and their related training areas, which were surveyed in 2002; see Hedman et al. 2003) were estimated based on projected non-dudded and duded munitions ranges. Additional archaeological fieldwork involved survey of bank stabilization areas along Ship Creek and an easement proposed for Municipal Light and Power utilization. No historic properties will be affected by any of these proposed projects.

Setting

A recent floristic study of Fort Richardson was conducted by Lichvar *et al.* (1997), with a thorough description of the Fort's ecological setting. The following description is from *Vegetation of Fort Richardson* (Lichvar *et al.* 1997: Appendix 1):

Fort Richardson falls within the Cook Inlet Lowlands Section of the Coastal Trough Humid Taiga Province of Bailey's Ecoregions of the United States (McNab and Avers 1994). Forests in the Anchorage area closely resemble the Boreal Forest of Interior Alaska, although some understory and tree species occur that are typically found in the Coastal Spruce-Hemlock Forest. Fort Richardson's forests have been described as open, low-growing spruce and closed spruce-hardwood forests by Viereck and Little (1972), and as a lowland spruce-hardwood forest by the Joint Federal-State Land Use Planning Commission (1973). Packee (1994), in examining Alaska's forest vegetation zones, characterizes the region as an area where white spruce (*Picea glauca*) and Sitka spruce (*Picea sitchensis*) naturally hybridize; balsam poplar (*Populus balsamifera*) and black cottonwood (*Populus trichocarpa*) intergraded; and mountain hemlock (*Tsuga mertensiana*) may form the subalpine forest. Vegetation reflects the transitional nature of the climate between maritime and continental. This maritime climatic influence has resulted in a lower incidence of natural fire than is found in the spruce-hardwood forests of interior Alaska (Gabriel and Tande 1983). Upland sites on Fort Richardson are dominated by paper birch (*Betula papyrifera*), white spruce, and, on drier sites, quaking aspen (*Populus tremuloides*). Cottonwood and poplar are common in areas bordering principal streams. Black spruce (*Picea mariana*) is the dominant tree in wetter areas and on some well-drained sites. Most bogs are treeless or support stands of stunted black spruce. Grasses, herbs, willows (*Salix* spp.), and alders (*Alnus* spp.) dominate the vegetation in a narrow band along the Inlet and at elevations above 1,500 feet on the Chugach Mountain slopes.

Specifically, the project areas surveyed are largely comprised of upland vegetation including paper birch, white spruce, aspen and alders. Understory vegetation is moderate to dense, with various grasses and herbs including fireweed, lupine, and high-bush cranberry. Vegetation in the ISBC project area is considerably denser, dominated by alders, devil's club and cow

parsnip. Visibility in the ISBC project area, specifically, was greatly reduced due to this dense vegetative cover.

Background

Fort Richardson withdrawn lands fall within the traditional territory of the Dena'ina (sometimes spelled "Tanaina"), northern Athabascan Tribes of the Cook Inlet. In general, the Dena'ina traditionally pursued a semi-nomadic lifestyle, spending winters in permanent settlements and dispersing in the summer months with the onset of summer fish runs. Seasonal camps at favorable fishing locations were established along riverbanks, coastal edges and lakeshores, and were returned to each year. Once salmon runs had ended, groups would often focus on travel into the mountains to hunt caribou and mountain sheep. Such trips to the interior would also be a time for trading with other groups encountered during seasonal hunts. Moose, bear, mountain goats and Dall sheep were often hunted year-round in areas outlying winter village settlements (Townsend 1981: 626-627). Specifically, settlements at Knik Arm have been well summarized by Kari and Fall (1987:271-287, 313-341). The Knik Arm area has been described as "highly populated" in the past and various types of sites (villages, hunting lookouts, fish camps, etc.) have recorded for the region. Currently, the only Dena'ina village in the Knik area is Eklutna Village.

The Anchorage area was the location of several village sites prior to the arrival of Russian and Euro-American settlers; Anchorage itself was called *Qatuk'e'usht* (also *Xa'tikiuet*) by the people of Kenai, and once supported a Dena'ina village (Carberry and Lane 1986: 177; Yaw Davis 1965: 3). The mouth of Ship Creek historically supported a significant fish run and was the focus of fish camps and seasonal subsistence fishing prior to the advent of canneries and commercial fishing.

The introduction of Russian and Euro-American settlers into the region began with the famous voyages of Bering and Cook. In 1786, St. George became the first permanent Russian settlement established at Cook Inlet, at the mouth of the Kasilof River on the Kenai Peninsula.

Archaeology

Although glacial studies indicate that Cook Inlet may have been habitable by about 11,000 years before present (BP) (Reger and Pinney 1996), few archaeological sites dating earlier than the late prehistoric period have been identified within the Cook Inlet region. The earliest and arguably the most significant site in the Cook Inlet area is Beluga Point, located approximately 10 miles to the southeast of Fort Richardson, near the entrance to Turnagain Arm. Though largely lacking datable material beyond 4000 BP, artifact assemblages at Beluga Point indicate persistent use of the location throughout the Holocene.

The earliest component at Beluga Point is the undated BPN-I core and blade component, estimated at 8000 to 10,000 BP, based on similarities with dated material found elsewhere in Alaska (Reger 1977, 1981). The presence of this assemblage, which could be designated as a regional variant of the American Paleoarctic Tradition (e.g. Anderson 1970a, 1970b; Dumond 1977), makes Beluga Point the lone early Holocene site in the Cook Inlet region identified to date. The only other site in the region that exhibits a similar assemblage is the early middle Holocene Long Lake site, dating to approximately 6600 BP in the Matanuska Valley (Reger and Bacon 1996). Despite the coastal location, these early microblade assemblages have been interpreted as reflecting the activities of land-based hunter-gatherers (Workman 1996).

The middle Holocene (6000 to 4000 BP) in Cook Inlet is represented by components BPN-II and BPS-II at Beluga Point. Though also undated, the presence of microblades and ground slate

indicate an association with the maritime-adapted Ocean Bay I and II assemblages in the Kodiak archipelago, the Takli Alder and Birch assemblages of Shelikof Strait (Reger 1981:185-186), and assemblages from the Alaska Peninsula that appear to be associated with the Arctic Small Tool Tradition (Dumond 1977; Henn 1978).

Sites dating between 3000 and 1000 BP in the Cook Inlet region suggest the development and/or spread of Pacific Eskimo culture, seen in Norton affinities of a Beluga Point component dating prior to 1500 BP. It has been suggested that this period saw the spread of Norton peoples and technology from the Bristol Bay area (Reger 1981). A Norton influence in Cook Inlet is overshadowed in this period by a number of sites exhibiting strong similarities to Kachemak tradition sites to the south. Upper Cook Inlet Kachemak components differ from those of the Kenai Peninsula and Kodiak in that they exhibit a toolkit that is apparently more adapted to terrestrial hunting and riverine exploitation than maritime subsistence. Components at the Knik Arm sites of Cottonwood Creek (Decagonal 1975:25-26, 35-41), Fish Creek (Dumond and Mace 1968) and Moose River (Dixon 1980:32-34; Reger and Boraas 1991) are representative of this adaptation, later defined as Riverine Kachemak by Reger and Boraas (1996), dating to between 2000 and 1000 BP on the Kenai Peninsula.

By far the most visible prehistoric site type in the Cook Inlet region is that of the late prehistoric Athabascan Tradition. These sites, often characterized by rectangular house depressions, cache pits, few diagnostic artifacts, and an abundance of fire-cracked rock, are presumably associated with the Dena'ina Athabascans that are thought to have replaced local Eskimo groups in the archaeological record by perhaps 750 or 1000 BP (McMahan et al. 1991). Linguistic evidence and Dena'ina oral history suggest that Athabascan groups from the Copper River drainage and the upper Stony and Mulchatna Rivers began moving into upper Cook Inlet between 1500 and 2000 years ago (Kari 1988). Of special significance is the existence of the modern Athabascan village of Eklutna, located to the north of Fort Richardson on Knik Arm; important aspects of the history of this village are found in the work of Chandonnet (1979, 1985), Yaw Davis (1965, 1994) and Yarborough (1996). General information on the Dena'ina Athabascans gathered from studies in the Lake Iliamna—Lake Clark region is found in the work of Townsend (1965, 1970, 1975, and 1981) as well as that of Ellanna and Balluta (1992).

Previous archaeological work at Fort Richardson includes at least eight projects since the late 1970s (Bacon 1979; Hedman et al. 2003; Holmes 1979; Reynolds 1996; Shaw 2000; Steele 1978, 1980; Veltre 1978). Of these surveys, only Steele, Reynolds, and Shaw reported the discovery of archaeological sites. Steele's 1980 work identified 4 sites, (ANC-263, 264, 265, and ANC-268), all of which were historic 20th century cabin ruins. Reynolds (1996) recorded the multi-component (historic) site ANC-822 near Ship Creek in the vicinity of the Moose Run Driving Range. Shaw (2000) recorded approximately 20 sites, the majority of which were Army related mounds, foxholes, and bunkers. Shaw's work also revealed one prehistoric site, ANC-1175, composed of a single lithic flake and a small lithic spall, found in a disturbed context along the edge of the Elmendorf Moraine (Shaw 2000: 97). The work of Shaw (2000), Steele (1978), and Dilley (1996) indicate that moraine features scattered across Fort Richardson and oriented roughly northeast by southwest, represent a relatively high probability location for discovering prehistoric archaeological sites.

Historic Resources

In addition to the known archaeological sites on Fort Richardson, there are numerous features of historical and cultural significance, though the exact locations of many of these features have not been identified to date. Portions of the Iditarod National Historic Trail (ANC-270 and 280) are recorded historically and are known to potentially exist on Fort Richardson. The Girdwood-

Ship Creek Connecting Trail (ANC-280) descended through the Ship Creek valley to the vicinity of Fort Richardson, where it presumably joined the Eagle River-Knik Trail (ANC-270). Though it is likely that ANC-270 lies outside of Fort Richardson lands, a connecting trail from Anchorage to ANC-270 is known to have existed. This connecting trail is recorded as following the Eagle River drainage (presumably from Knik Arm) to Lake Clunie, and on to Birchwood (CEMML 2001:26). This route is likely to have followed Clunie Creek north from Eagle River to Lake Clunie, a route that crosses the northern portion of Fort Richardson.

In the 2002 field season (Hedman et al. 2003), an historic fish camp site was re-located (Figure 2). In 1994, Yaw Davis conducted a collaborative study with the “Dena’ina Team” from the Native Village of Eklutna to identify traditional cultural sites and document traditional land use on Elmendorf Air force Base. This study also included a portion of Fort Richardson near its southern boundary with Elmendorf, and north of Eagle River Impact Area, to Whitney Point. A fish camp site was identified at that time near Whitney Point, which was used by the Eklutna Industrial (Vocational) School from 1924 to 1946. The fish camp site was originally identified during the 1994 study, however no location details were recorded, or clear photographic record documented at the time.

In 1924, the Department of the Interior Bureau of Education built and maintained the Eklutna Industrial (Vocational) School. The school was established to house 26 orphans, whose parents had died in the flu epidemic of 1918 (Carberry and Lane 1986: 174). The industrial school was a multi-faceted institution that included a collection of buildings (including a six room hospital, isolation ward, director’s cottage, girls’ and boys’ dormitories, shop, gymnasium, cannery car, meat house, paint house, barn, brooder shed, laying house, waiting station and hog house (Chandonnet 1979: 21). Within two years the school’s population doubled, and there was a waiting list for new students. The fish camp site was



Figure 2. School Fish Camp site, facing southwest

constructed and used by the school to provide training in traditional fishing methods, while also providing fish for the school’s subsistence (Yaw Davis 1994: 53). By 1946 the buildings had been condemned and the school was permanently closed (Chandonnet 1979: 22).

Military Properties

A number of historic properties are located on or near Army lands in Alaska; many of these properties are historic structures and buildings pre-dating or associated with World War II and Cold War era Army activities (see e.g., Hollinger 2001, Shaw 2000). As found during earlier

surveys on Fort Richardson (e.g., Shaw 2000), evidence of previous military training activity was prolific throughout the proposed project areas. Heavy disturbance from trench building, foxholes and UXO (unexploded ammunitions) were observed frequently during survey. Although there is a possibility that some of these features may date to training undertaken during World War II and the immediate post-war period, none of these features can be clearly assigned to a specific date. Features such as these were referred to as “Base Ground Defense Sites” by Shaw (2000) (and discussed throughout this report as ‘military survival tactics training sties’), and were uniformly determined to be not eligible for listing on the National Register (Shaw 2000: 16-22, 121). As Shaw explained (2000: 16):

...[such sites are] temporary, theater-of-operations type structures, which are in a deteriorated condition with the construction date being uncertain within about 10 years. Most [military training] sites...have lost physical integrity through neglect after abandonment. The sites have also lost other aspects of integrity regarding design, setting, materials, workmanship, feeling and association over the years by neglect and/or direct actions resulting from operating a military base with changing physical requirements associated with execution of the primary mission. Such actions range among planned demolition of buildings judged to be excess property, inadvertent destruction of structures during new uses of the land such as for gravel pits, construction of new facilities which intrude into and radically change the site setting that existed during WWII, and direct efforts to “clean up” the sites when use stopped.

Specific examples of military survival tactics sites identified throughout the field survey areas include trenches, foxholes, log-lined foxholes and bunkers/wood-framed structures and blinds (Figure 4).

Features associated with past military training operations, found throughout training areas at Fort Richardson, currently have shown no clear pattern or relationship as identified in the field (see Figure 3). Similar to Shaw’s findings, the continued use of these areas for subsequent military activities has heavily impacted the original structural integrity of the features; all structures encountered lack integrity due to deterioration. Evidence of continued use and re-use of military survival tactics structural materials during training exercises (e.g., to construct

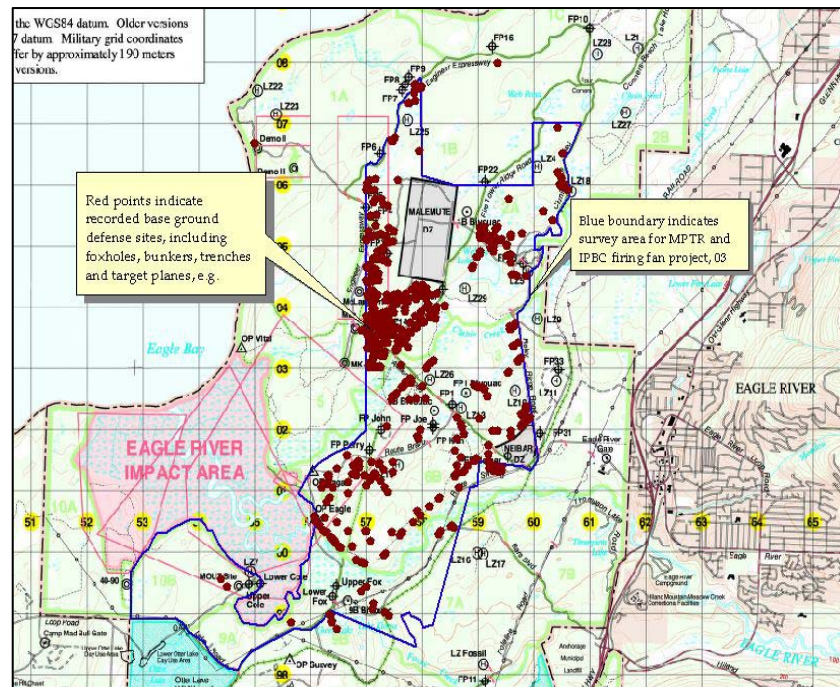


Figure 3. Distribution of military survival tactics training sites identified during 2003 survey

blinds or targets) was prolific. As Shaw has noted, archaeological evaluations of these features would not contribute significantly to our understanding of military training history in WW II, and do not qualify under National Register of Historic Places criteria D (36 CFR 60.4). As a result, these features have been determined not eligible for listing in the National Register of Historic Places.



Figure 4. Examples of military survival tactics training sites identified throughout survey area. Left-mechanical debris; right-parallel trench

2.1 Multi-Purpose Training Range (MPTR) and Infantry Platoon Battle Course (IPBC) Training Range Firing Fan Surveys

In 2002 USAG-AK proposed range development projects within Army Alaska (USARAK) lands at Ft. Richardson, involving the construction of new training ranges. Surveys for the Multi-Purpose Training Range (MPTR) upgrade/expansion project and the Infantry Platoon Battle Course (IPBC) were conducted in the 2002 field season (Hedman et al. 2003). Additional surveys were undertaken in the 2003 field season to address areas potentially impacted by munitions firing (the firing fan) associated with the utilization of the MPTR and IPBC training ranges.

The new training range complex and supporting facilities will be used to train USARAK and other Alaska soldiers in infantry squad/ platoon tactics and basic urban/suburban operations using automated targetry, enabling trainers to vary scenarios presented to trainees. The (ISBC), located on North Post between Malemute Drop Zone and Eagle River Flats, is a larger-scale course designed for combat realism and larger unit (platoon) training. The MPTR will provide qualification and training scenarios for vehicle-mounted, crew-served weapons crews. Munitions fired from this range will be non-dudged (e.g., inert high explosive anti-tank and inert high explosive plastic), similar to munitions currently fired at Fort Richardson. As a part of training exercises, other weapons (e.g., mortars, artillery) could be indirectly fired over the IPBC and MPTR ranges to provide combat realism. These indirect rounds would impact in Eagle River Flats, a current impact area, and would be fired within restrictions established for such firing within U.S. Army Alaska Regulations (350-2, Training).

No historic properties or cultural resources have previously been identified within the area of potential effect for the proposed IPBC and MPTR range firing fans.

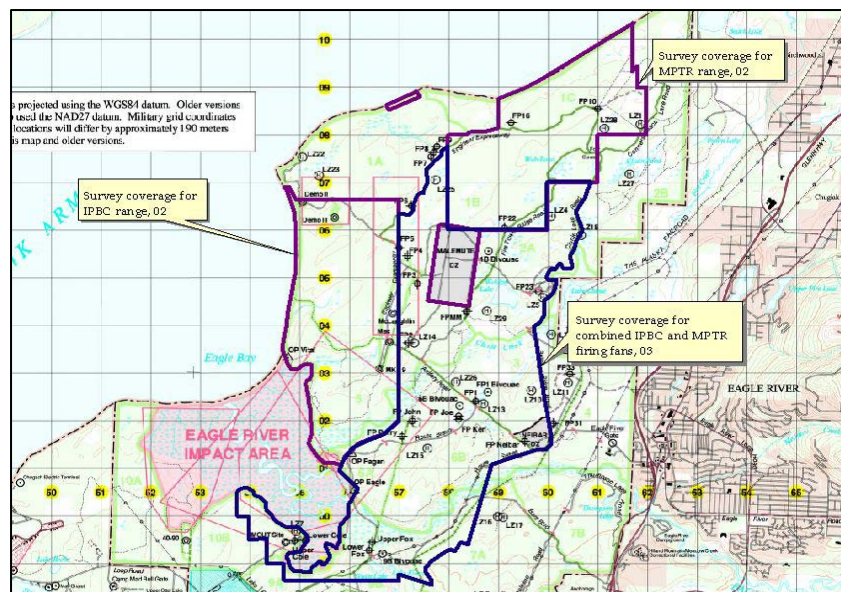


Figure 5. Location of survey coverage for IPBC and MPTR training ranges (2002) and combined firing fan (2003)

Survey and Field Methods

In July and August 2003, an archaeological survey crew of four archaeologists employed by the CEMML, conducted a pedestrian survey of the proposed IPBC and MPTR range firing fans, under the supervision of Ft. Richardson archaeologist, Kirsten Anderson. Pedestrian surveys were carried out in accordance to the guidelines established in the *Research Design: U.S. Army Alaska 2003 Range Developments, Section 106 Archaeological Inventory and Evaluation, Ft. Richardson and Ft. Wainwright*. This research design was submitted to the SHPO for review and comment, as required by 36 CFR 800, in March 2003.

The firing fans for the two training ranges cover a single, large area extending to the edge of Eagle River Flats Impact Area on the southwest, and to Clunie Lake on the east (see Figure 5). The APE encompassed an area larger than the proposed range firing fan footprint in order to ensure coverage of areas that may incur secondary impacts during training use. Terrain that exceeded slopes of 40° was eliminated from survey, as no impacts will occur on slopes greater than 30°. Additionally, every effort was made to survey low-lying wet areas, but some wetlands were eliminated from survey coverage, due to inaccessibility, lack of visibility, and low probability of containing intact cultural deposits.

Parallel pedestrian transects spaced at approximately 20m intervals were walked either north-south or east-west, depending on terrain and access. Transect survey units were partitioned according to existing roads and trails where possible. When existing roads did not provide for practical unit boundaries, a one square kilometer work unit was defined.

Given the poor visibility and dense vegetative cover throughout the proposed project area, sub-surface testing was conducted in areas considered to be high probability, based on previous survey and research (e.g., lake margins, glacial moraines and ridges, river/stream confluences) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 40cm x 40cm, and frequently did not go below a depth of 70cm. Levels were dug in 7cm intervals, unless clear stratigraphy dictated otherwise, and soils were screened through ¼" hardware cloth.

An intensive survey of the Eagle River's banks within the proposed project area was included in addition to the overall survey, as survey coverage approaching Eagle River from the north and south generally concluded on high ridges overlooking the river below. Survey of the river banks began heading upstream from the east boundary of the Eagle River Impact Area, extending to the eastern boundary of the projected firing fan (Figure 5). Vegetation was dense, ending abruptly at the river's edge in most places.

Structures

Quonset Hut (ANC-01331)

The ruins of one 'Quonset' type hut were identified to the south of Artillery Road, approximately 2.5 kilometers east of Eagle Bay (Figure 6). The structure is a corrugated steel-framed and roofed structure in a dilapidated state, with the roof caved in and structural integrity of the adjacent walls failing.

Quonset huts were first utilized by the military during World War II and went through a series of adaptations and modifications. Originally based on the 'Nissen' hut designed in Britain for use in WWI, the Quonset hut design was modified to improve upon speed of construction and durability, with the 'Quonset Type II' (Williams 2003: 16):

The hut the Navy poetically termed the 'Quonset redesigned hut' had 'short straight nailable members arranged to form a multi-angled barrel vault' (Architectural Forum, February 1945). The composite I-beam framing members described above were cut, bent, and welded to form a 4-foot vertical sidewall with a segmented 'curve' above. The number of segments (all four feet long) is determined by the width of the hut; the 16'x36' size, which was still the basic type, had seven counting the walls and an inside height of about 8 feet. Each rib was still shipped in two pieces that bolted together at the top. The exterior covering was vertically-oriented, with curved

corrugated metal over the roof and short straight corrugated metal on the 4-foot walls. The metal was fastened to the ribs and purlins with double headed nails driven through a steel and fiber washer to keep out rain. The nails were placed through the high point on a corrugation to avoid holes where water would accumulate. The joints of the sheets were buttered with mastic (National Steel 1944; personal observations 2000-2). Endwall frames were metal (wood may also have been used)...

Both the 'Quonset Type II' and the Armco Hut/Elephant Shelters developed later for 'iron bunkers and ammunition magazines' (Williamson 2003: 38) share characteristics similar to those observed on the 'Quonset' hut ruins identified during survey. The vertically-oriented side panels with corrugated metal panels curving to form the roof, along with limited evidence of rib beams and wooden end panels suggest a stronger correlation with the 'Quonset Type II.' It is likely that the hut was once used for military training ammunition storage, but this cannot be confirmed.



Figure 6. View of 'Quonset' hut ruins

Given the advanced state of deterioration and subsequent lack of integrity, the Quonset hut identified during survey is not eligible for listing in the National Register of Historic Places. Additionally, archaeological evaluations of the Quonset hut ruins would not contribute significantly to our understanding of military training history, falling under similar conditions of use, re-use and decay as that identified under Shaw's (2000) 'Base Ground Defense Sites.' Subsequently, the Quonset hut ruin is not eligible under National Register of Historic Places criterion D.

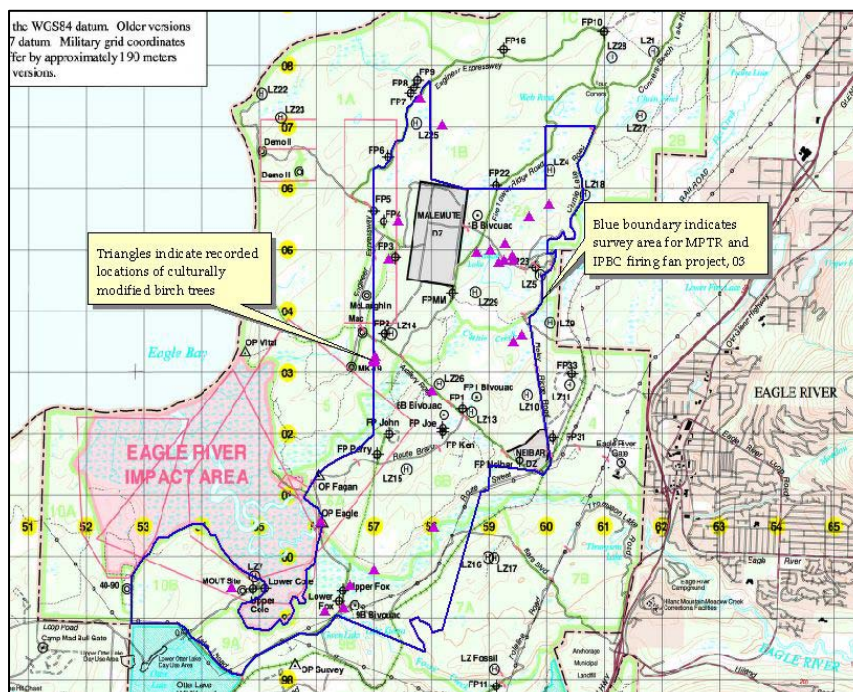
Bark Stripped Trees Over

26 bark stripped birch trees, or "culturally modified trees" (CMTs) were identified during survey of the proposed IPBC and MPTR training range firing fans (Figures 7 and 8). Many of these trees were interspersed among military survival tactics training sites, while others were located along ridges and in other isolated groupings. In areas where bark stripped trees were identified, test pits were excavated to determine if any sub-surface cultural features were associated with the area. However, all test pits excavated were negative, recovering no cultural material. Cultural resources studies undertaken previously have affirmed that groupings of peeled birch trees near Otter Lake are the work of Boy Scout troops who attended an annual summer camp at Ft. Richardson (Shaw 2000: 94). However, this explanation cannot be confirmed for all peeled birch trees, and it is likely



Figure 7. Example of bark stripped birch tree identified during survey

that some of those identified during survey may be trees modified by traditional subsistence activities.



thus been directed on a much different history of use and an ecological environment than that of the paper birch trees that predominate in the Alaskan Interior. Additionally, paper birch (*Betula papyrifera*) trees—such as those found throughout the survey area—have a life span that rarely exceeds 80-100 years of age, with a maximum recorded age of 230 years (Viereck and Little 1972: 136) rendering the age and potential cultural significance of bark stripped trees difficult to determine without further traditional use studies.

Eagle River fire-ring

(approximately <6cm on average) and comprised of alluvial silts overlying river cobbles. No ground depressions were identified in the vicinity of the fire ring, despite intensive examination.

Directly northeast of the fire ring by approximately 1.5m, is an overturned tree root wad, where two Meal Ready to Eat (MRE) plastic packages are located on the ground surface. It is unclear if these MRE packets are directly relatable to the fire ring; however, given the limited distance between the two findings, it appears likely that they are related. Based on the proximity of the MRE packages indicating a date of less than 50 years old, and the lack of cultural deposits or material identified in the surrounding area, the fire ring appears to be a temporary, modern feature. Subsequently, the site is not eligible for listing in the National Register of Historic Places. Additionally, the location of the fire ring will not be impacted by proposed firing fan activity, as no munitions are expected to be fired across Eagle River.



Figure 9. View of fire ring, lined with river cobbles, adjacent to southern bank of Eagle River

No prehistoric cultural materials were identified during the field inventory.

2.2 Infantry Squad Battle Course (ISBC) Training Range Firing Fan Survey

Similar to the MPTR and IPBC training ranges, USAG-AK developed an Infantry Squad Battle Course (ISBC) training range on south post, east of the Glenn Highway (Figure 10), on which construction began in 2003. Surveys for the proposed ISBC training range were conducted in 2002 (Hedman et al. 2003). Additional surveys were undertaken in 2003 to address the area potentially impacted by firing munitions (the firing fan) resulting from use of the ISBC.

The proposed project will utilize the new ISBC training range in order to meet requirements for implementation of the military mission at Fort Richardson. The training range firing fan will support proposed implementation of the Stryker Brigade Combat Team (SBCT) transformation.

USAG-AK is constructing the training range complex and supporting facilities to train USARAK and other Alaska soldiers in infantry squad/platoon tactics and basic urban/suburban operations using automated targetry, enabling trainers to vary scenarios presented to trainees. The ISBC, located on south post on what is now Davis Range (built on top of a former tank table range), will include a Breach Facility, an Urban Assault Course, and a Shoot House. These ancillary ranges would be arranged near the ISBC and share common support facilities. The ISBC will include new targetry that, based on current projections, expands to the east/southeast of the training area proper, to the south of Ship Creek (Figure 10). No historic properties or archaeological sites have previously been identified within the area of potential effect for the currently proposed ISBC range firing fan.

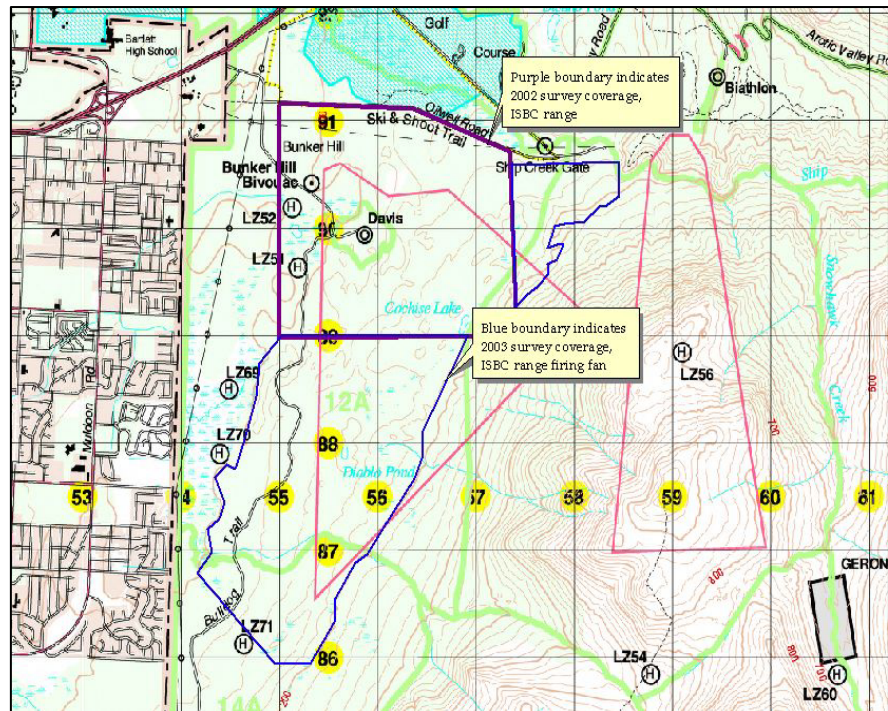


Figure 10. Location of ISBC training range (2002) and firing fan (2003) survey areas, south Fort Richardson

Survey and Field Methods

In June and July 2003, an archaeological survey crew of four archaeologists employed by CEMML, conducted a pedestrian survey of the proposed ISBC range firing fan. The project's APE encompassed an area larger than the proposed range firing fan footprint, in order to ensure coverage of areas that may incur secondary impacts during training use. The survey area subsequently covered approximately six square kilometers, between the Ship Creek gate and Bunker Hill. Terrain that exceeded slopes of 40° was eliminated from survey, as no impacts will occur on slopes greater than 30°.

Parallel pedestrian transects spaced at approximately 20m intervals were walked either north-south or east-west, depending on terrain and access. Transect survey units were partitioned according to existing roads and trails where possible. When existing roads did not provide for practical unit boundaries, a one square kilometer work unit was defined.

Given the poor visibility and dense vegetative cover throughout the proposed project area, sub-surface testing was conducted in areas considered to be high probability, based on previous survey and research (e.g., lake margins, glacial moraines and ridges, river/stream confluences) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 40cm x 40cm, and frequently did not go below a depth of 70cm. Levels were dug in 7cm intervals, unless clear stratigraphy dictated otherwise, and soils were screened through ¼" hardware cloth.

Findings

The remains of two structures were identified during survey, and were further investigated to assess potential eligibility to the National Register of Historic Places.

Log-constructed storage structure/cabin

An approximately 3m x 3m log structure was identified during survey, located on a hilltop immediately east of Bulldog Trail, south of Ship Creek (Figures 11 and 12). Surrounding the area are birch and alder, with devil's club and various forbs.

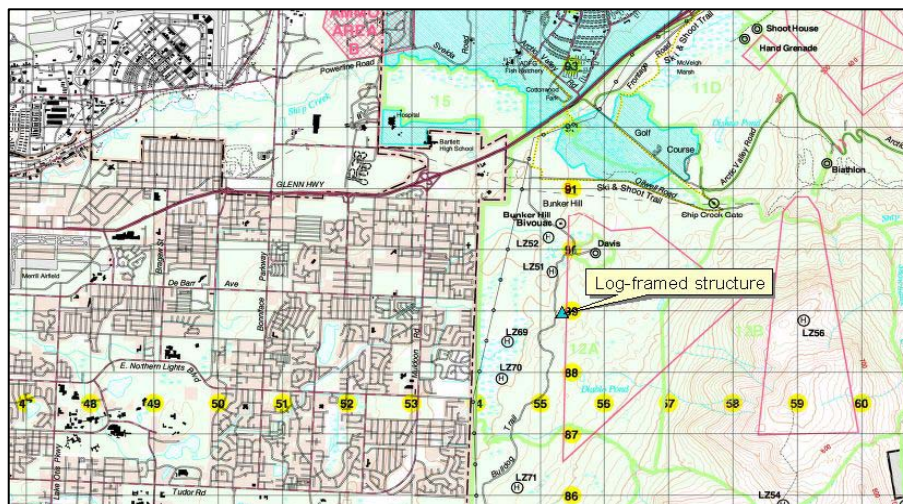


Figure 11. Location of log-constructed feature

The structure is of notched log construction, with evidence of both machine and hand axes used in its construction. Large, round-headed nails secure the notched corners. The remains of the structure are now 2 to 3 log courses in height, with evidence of roofing logs/material fallen to the floor of the structure. The logs are in a state of decomposition, with the presumed entrance to the structure slumped and unstable. Seven test pits were excavated; four within the confines of the existing remains, and three outside the structure on a roughly north-south, east-west axis. Three nails, identical to those visible in the remaining corners of the structure, were recovered from the first test pit, while two fragments of modern bottle glass and a second nail were recovered from the second test pit. The bottle glass is modern, with very little patina visible on

the surface. Additionally, a pull-tab “Dr. Pepper” can was recovered in the corner of the structure, as were clear and red plastic fragments (a date no earlier than 1962, and most likely dating to the late 1960s is indicated for the “Dr. Pepper” can). No material was recovered from test pits excavated outside the foundation of the structure.

The immediate ground surface of the cabin/structure exhibits numerous undulations, appearing similar to various foxholes identified during pedestrian survey of training ranges, and in Shaw’s survey of proposed railroad corridor re-alignments (Shaw 2000). It is likely that some of these depressions were originally associated with the log structure, and were not constructed explicitly for military training, but were utilized in subsequent training missions. A trail heading



Figure 12. View of first log structure, facing northwest

northwest from the cabin/structure is visible, leading to a clearing in the trees, however there was no evidence of deliberate clearing. A peeled birch tree is located at this cleared area. Various deep depressions are extant to the west of this clearing, heading down the slope of the hill, and are most likely associated with military training, appearing similar to foxholes and make-shift bunkers seen throughout the proposed project area. Recent research on the history of homesteads on Fort Richardson indicates that the site and original structure were not associated with any recorded homestead parcels (Hollinger 2001).

The presence of plastic fragments, modern bottle glass and a pull-tab can (dating only as early as 1962) indicate that the log feature is most likely not over 50 years old. Additionally, subsurface investigations revealed very little to no material. Excavation of the structural remains would not contribute significantly to our understanding of cabin/storage use on Fort Richardson, and thus the feature does not qualify under National Register Criterion D. Previous research on the early homesteads of Fort Richardson indicates that this location is not a recorded homestead property, and is not associated with the early homestead history of Fort Richardson/Elmendorf Field (Hollinger 2001). Similarly, as Shaw (2000) described in his assessment of military base ground defense sites, the continued use of the area for military training and activities have heavily impacted the original structural integrity of the remains and immediate surroundings. As a result, the site is not eligible for listing in the National Register.

Second log-framed feature

A second log-framed foundation, approximately 4m x 4m, was identified to the south of an unnamed creek, immediately west of Bulldog Trail (Figures 13 and 14). The feature is comprised of a square log frame or foundation, standing three log courses in height. The

location is generally flat, surrounded by birches, intermittent spruce, and low shrub vegetation. The location is a naturally clear area, in generally intermittent birch/spruce habitat encroaching on wetlands.

Like the feature described above, these log remains are also notched in construction, with very shallow notching made by an axe. No nails are evident as a securing measure, and the structure gives every appearance of being superficial, temporary, or abandoned while under construction. A large (approximately 1m x 2m) piece of plywood, with superficial machine-planed grooves on one side, lies on the ground in the northwestern section of the structure. An investigation of the surrounding area exhibited various small depressions that appear to be foxholes.

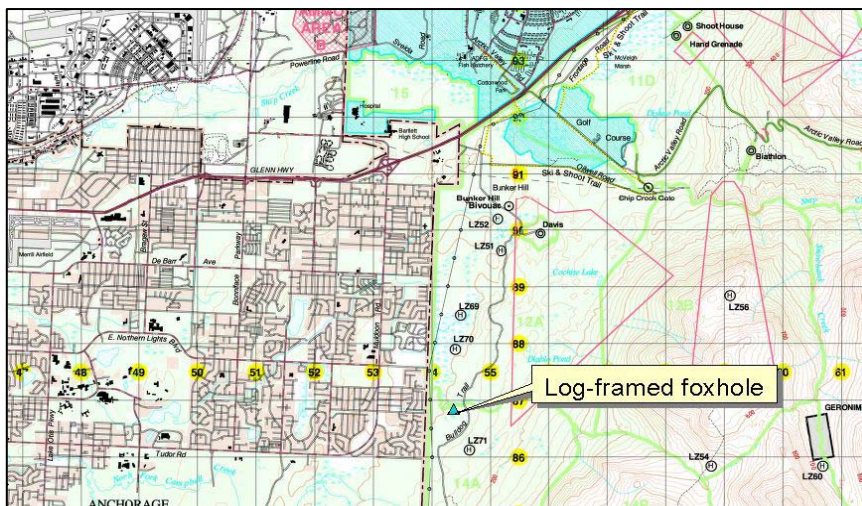


Figure 13. Location of second log-framed feature, Davis Range

Four subsurface test pits were excavated, three within the structure and one outside the structure to the east, where a small depression was located. No material was recovered from any of these shovel tests. Decaying logs that would be likely evidence of a roof or standing structure are absent. The ground enclosed within the frame is very flat, covered by vegetation and the large sheet of plywood.

Shaw identified a similar feature during survey for proposed railroad re-alignments on Fort Richardson (2000: 116-120; ANC-1177), and identified the feature as a 'crib-framed foxhole.' Although the structure identified by Shaw had a clear foxhole like depression enclosed by a frame of small logs, the superficial/temporary nature of the feature identified here appears to share similarities with that described by Shaw (2000: 116-120), and subsequently most likely falls under Shaw's assessment of 'Base-Ground Defense Sites' (2000; discussed above). Previous research indicates that this area was not a homestead property prior to the withdrawal of the land for use as Elmendorf Field and



Figure 14. Log-framed structure, facing west-northwest

later Fort Richardson (Hollinger 2001). Given the lack of material recovered in investigations of the log feature, and the evidence of foxholes and disturbance from military training in the general locality, the frame was determined not eligible for listing in the National Register.

Summary

Survey and sub-surface testing failed to identify any historic properties within the boundary of the proposed ISBC firing fan project area of potential effect. The project area has been heavily disturbed by previous military activities, evident in interspersed foxholes, bunkers, UXO, and military training debris found throughout the surveyed area. None of these features were determined eligible for the National Register. Additionally, two log-constructed features were identified and investigated, but were determined not eligible for listing on the National Register, based on the investigations and assessment detailed above.

2.3 Ship Creek Stream-bank Stabilization Project

USAG-AK proposed a stream bank stabilization project to correct erosion along the north bank of Ship Creek west of the Glenn Highway on Fort Richardson in six areas and to improve habitat along the creek banks (Figures 15 and 16). Six proposed stream bank rehabilitation areas located along Ship Creek,

between the Glenn Highway and the Fort Richardson fish hatchery, were identified for stabilization. As of June 2, 2003 only one restoration plan has been developed for Area 2; restoration plans for Areas 1 and 3-6 will be developed in the future as funding becomes available. The proposal for Area 2 involves the construction of 5 stone Bendway weirs which will redirect the flow of water away from the eroding access road and water wells that are utilized by the fish hatchery. Overlapping root wads will be placed between the Bendway weirs, in order to further secure the toe of slope. Coir logs, live willow staking and vegetative matting techniques will also be utilized to reestablish the vegetation growth up to the adjacent road.

Background

Shaw's study (2000) of proposed railroad realignment sections included southern portions of the Ship Creek bottomlands, immediately adjacent to the Ft. Richardson boundary on Elmendorf Air Force Base. A survey of the proposed right-of-way through the bottomland adjacent to the banks of Ship Creek revealed no cultural material; however Shaw did comment on a number of mature stands of cottonwood, birch, and

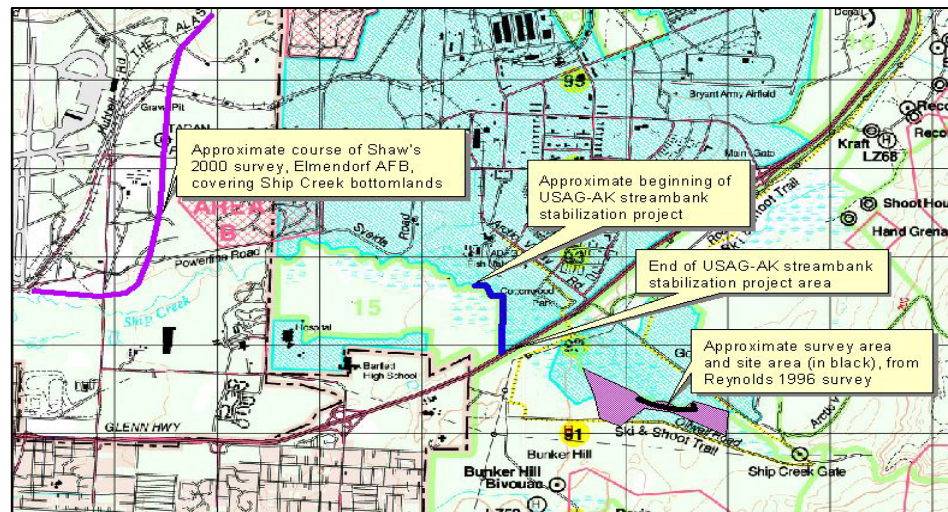


Figure 15. Location of project area, with previous survey work conducted identified



Figure 16. Aerial view of proposed project areas along Ship Creek

spruce, but observed no bark-stripped birches (2000: 30). Shaw also commented on burn scars observed on mature cottonwood trees that could potentially be of cultural origin; however, he did not feel that these modifications were indicative of a particular or unusual activity, and thus did not consider the scarring significant. No further investigation was considered warranted (2000: 30).

Reynolds (1996) conducted a survey along Ship Creek to the east of the presently proposed project area for construction of the Moose Run Golf Course. One site was identified, consisting of several features including a cut log, a system of trails (none of which could be identified specifically as fragments of the Iditarod National Historic Trail), the remains of a cabin and root cellar, a cache pit and two rectangular depressions. However, the integrity of the site was considered severely eroded, and as a result the site was determined not eligible for listing in the National Register of Historic Places (Reynolds 1996).

No historic properties or archaeological sites have previously been recorded within the proposed area of potential effect of the current Ship Creek stream bank stabilization project.

Survey and Field Methods

A pedestrian survey of the six proposed stabilization areas was conducted on May 20th and 21st, and again on June 9th 2003. Transects were walked parallel to the stream banks on both the north and south sides of Ship Creek,

west of the Glenn Highway crossing, and were walked in a meandering pattern to maximize coverage of potentially impacted areas. Due to reduced visibility from vegetative cover, opportunistic survey tactics were employed, focusing on areas of good visibility and where direct



Figure 17. Area 2, example of proposed stabilization measures along Ship Creek banks



Figure 18. Grooved stone observed out of context on construction berm/pile, southwest Ship Creek project area

impacts are anticipated, i.e., immediately adjacent to stream banks and along existing road/pathways where heavy equipment may impact outlying areas.

The project area shows evidence of heavy disturbance, apparent in imported and re-deposited gravels/fill from construction of the adjacent road base on the north, and in the construction of park facilities on the northeast corner of the project area, near the Glenn Highway crossing. Additionally, heavy construction resulting from previous stabilization and placement of riprap in the southwest project area has disturbed existing ground contexts. Extensive erosion has also occurred, scouring and undercutting adjacent stream banks. Exposed stream banks were inspected for evidence of stratigraphy and cultural material; however, exposed banks exhibited heavy glacial deposits, with no evidence of cultural material observed. Soils are generally friable on the creek/wetland margins, with gravel inclusions.

During initial survey, one potential cultural item was observed in the southwest corner of the project area: a rounded river cobble exhibiting a groove, circumscribing the upper half, not unlike a net sinker (Figures 17 and 18). However, the cobble was observed resting on top of a berm constructed when riprap was placed along the stream bank, and lies in the midst of construction debris and re-deposited rock/soil. The surrounding area was examined thoroughly for any evidence of intact soil contexts or cultural material, but none was observed.

Due to the importance of Ship Creek as a major fishing corridor and its history of use as a focus of fish camps, several areas were investigated through shovel testing, to ensure full coverage of the proposed project areas. Shovel tests were placed in several areas where mature cottonwoods stand, where visibility is most restrictive, and where direct project impacts are anticipated. Beneath a duff layer of approximately 4-5 cm, soils are loamy, with dense gravel/cobble inclusions. All excavated soil was screened through ¼" hardware cloth. No cultural material was identified.

Summary

No cultural material was observed during pedestrian survey and shovel testing. Disturbance in the area is extensive, resulting from road bed and park facility construction on the north bank of Ship Creek, and from previous placement of riprap and construction of a berm in the southwest part of the project area, resulting in major disturbance to original soil deposition. Impacts from the proposed project should be minimal, consisting of heavy equipment use and ground disturbance from the installation of root wads. As the proposed erosion control areas are within previously disturbed contexts (i.e., alongside the north bank of Ship Creek, where a road and park facilities have been previously constructed), any impacts to undisturbed ground will be minimal, and the project should have no effect on historic properties.

Additionally, some secondary impacts may occur to the southwest banks of Ship Creek near an existing dam and across from the Fort Richardson Fish Hatchery, where boulders may be replaced or removed. However, this area has undergone extensive previous disturbance, and a thorough surface examination of the area identified no intact deposits in the proposed project area. One object of potential cultural origin was identified in this southwest area, however. A possible artifact (Figure 18) was observed out of context atop a constructed berm and an intensive examination of the surrounding area yielded no additional cultural material or evidence of undisturbed ground contexts. Thus, the project will have no effect on historic properties.

2.4 Municipal Light & Power Line Easement Project

In 2003, USAG-AK proposed to upgrade its utilities infrastructure and reduce its operation and maintenance costs at Fort Richardson. As a result, new options have been explored to supply power to the post, involving the decentralization of heating by the installation of individual boilers at various buildings in place of the steam heat that is currently provided by the Fort Richardson Central Heat and Power Plant (CH&PP). Such an undertaking involves the purchase of commercial power from a local provider, ML&P.

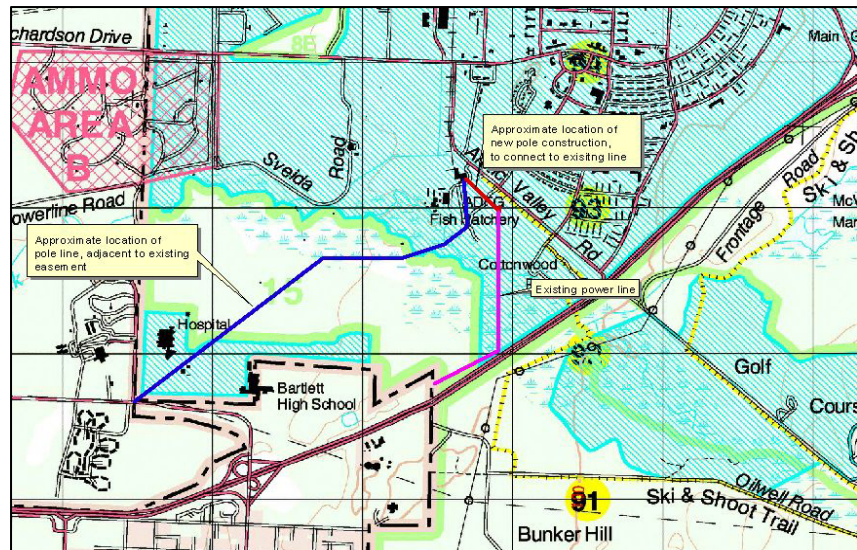


Figure 19. Location of project area on Ft. Richardson

Under the proposal, a redundant power line would be constructed along Steamline Road, with an easement established for ML&P's construction of the power line (Figures 19 and 20). Additionally, ML&P will need to install three to four power poles to connect the existing line to the Fort Richardson Hatchery and the Fort Richardson substation. It has been proposed to construct the redundant power line (1.65 miles) along Steamline Road in the winter, when the ground is frozen, to minimize ground disturbance.

Previous surveys conducted near the project area have not identified any archaeological resources. Shaw's study (2000) of proposed railroad realignment sections included southern portions of the Ship Creek bottomlands, immediately adjacent (west) to the Ft. Richardson boundary, on Elmendorf Air Force Base. A survey of the proposed right-of-way through the bottomland adjacent to Ship Creek's banks revealed no cultural material; Shaw did comment on a number of mature stands of cottonwood/birch/spruce, but observed no bark-stripped birches (2000: 30). Shaw also commented on burn scars observed on mature cottonwood trees that could potentially be of cultural origin; however, he did not feel that these modifications were indicative of a particular or unusual activity, and thus did not consider the scarring significant. No further investigation was considered warranted (2000: 30)

No historic properties or archaeological sites have previously been recorded within the proposed area of potential effect of the current ML&P intertie project.

Survey and Field Methods

A pedestrian survey of the project area was conducted on June 30th 2003 by CEMML archaeologists. Transects were walked on the edge of the existing easement, to investigate areas where any secondary impacts may occur. Due to reduced visibility from vegetative cover, opportunistic survey tactics were then employed, focusing on areas of good visibility, and where

direct impacts are anticipated, such as immediately adjacent to the existing road/pathways, and where heavy equipment may impact outlying areas.

The project area showed evidence of heavy disturbance, with an existing road that covers much of the area. Additionally, heavy construction resulting from previous development at the fish hatchery, along the banks of Ship Creek where road construction has occurred, and surrounding the existing substation and power line, is extensive. Additionally, the proposed easement crosses wetlands and flat areas, where the probability of site localities is extremely low, based on the findings of previous surveys in the Anchorage bowl area (see e.g., Shaw 2000; Steel 1978, 1980).

Summary

No cultural material was observed during pedestrian survey. Disturbance in the area is extensive, resulting from road bed/easement construction, and from previous development surrounding the fish hatchery, existing substation, and existing road placed parallel to Ship Creek. Soil deposition has thus been heavily disturbed. Impacts from the proposed project should be minimal, consisting of hand clearing vegetation and the installation of power poles during the winter months, when ground disturbance will be minimal. As the proposed project is located in previously disturbed contexts, any impacts to undisturbed ground will be minimal, and the project will have no effect on historic properties.

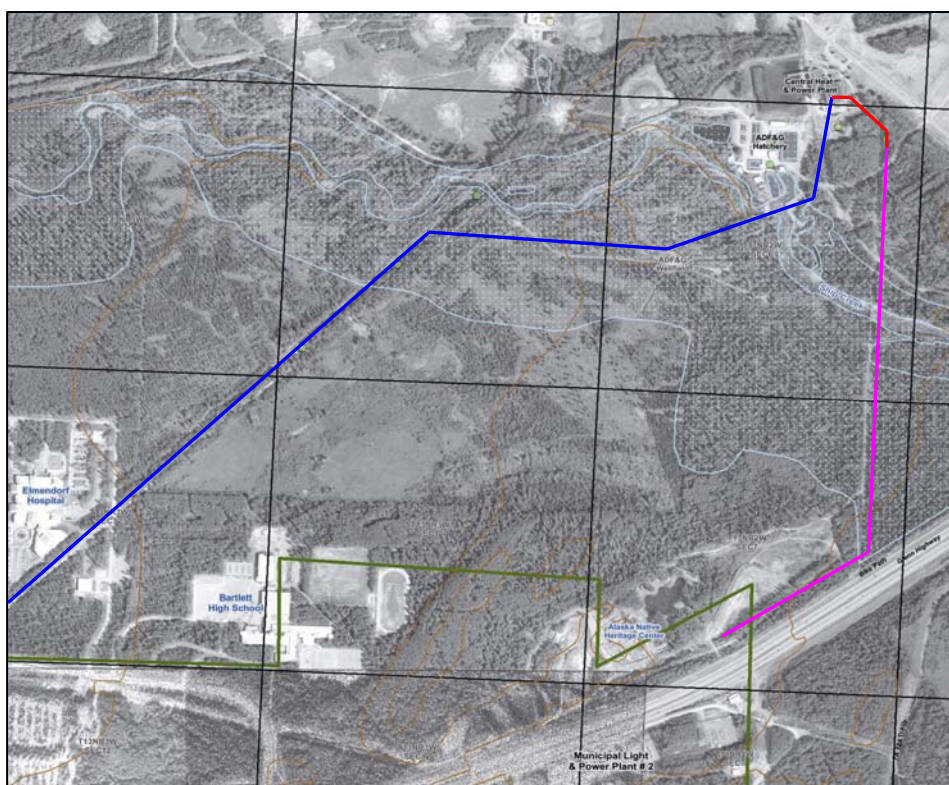


Figure 20. Aerial view of proposed project area

3.0 Fort Wainwright (Including the Donnelly Training Area)

Introduction

Similar to the archaeological research undertaken at Fort Richardson, the surface danger zones (firing fans) for three range construction projects were the primary focus of archaeological work at Fort Wainwright's Yukon Training Area in 2003. These ranges include an Infantry Platoon Battle Course (IPBC) located in the western portion of Fort Wainwright's Yukon Training Area, an Infantry Squad Battle Course (ISBC) located to the east of the IPBC, and a Multi-Purpose Training Range (MOUT) located in the southwestern portion of Yukon Training Area. Additional archaeological fieldwork during 2003 included surveys for the Johnson Road Maneuver Corridor, the ISBC MAC Training Site, the Firebird Assault Strip Firing Point Site, the Quarry Expansion, and a demolition range at Bravo Battery. No historic properties will be affected by any of these proposed projects.

At Donnelly Training Area, USAG-AK proposed four major range development projects which were the primary focus of survey during the 2003 field season. Additional survey and analysis was conducted for a gravel source, access roads, stream stabilizations and a bridge replacement project.

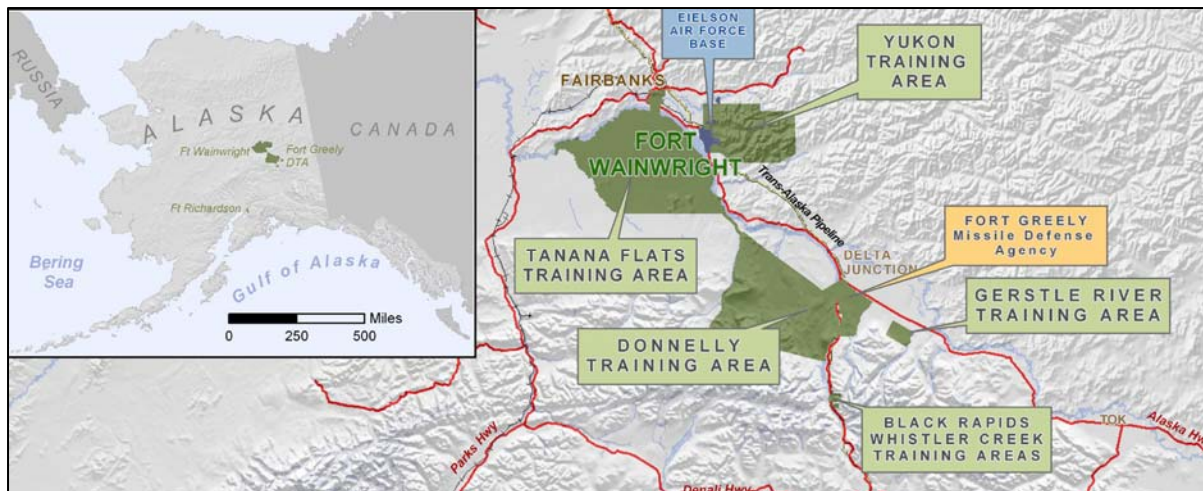


Figure 21. Location of Fort Wainwright, including the Donnelly Training Area

All pedestrian surveys were carried out in accordance to the guidelines established in the *Research Design: U.S. Army Alaska 2003 Range Developments, Section 106 Archaeological Inventory and Evaluation, Ft. Richardson and Ft. Wainwright*.

Setting

Fort Wainwright is located in central Alaska, north of the Alaska Range in the Tanana River valley. The post lies 120 miles south of the Arctic Circle near the cities of Fairbanks and North Pole in the Fairbanks North Star Borough. The installation consists of the Main Post, Tanana Flats Training Area, Yukon Training Area, Dyke Range, and Donnelly Training Area, which lies near Delta Junction, within the boundaries of former Fort Greely.

Fort Wainwright has the northern continental climate of the Alaskan Interior, characterized by short, moderate summers, long, cold winters, and little precipitation or humidity. Average

monthly temperatures in Fairbanks range from –11.5° Fahrenheit (F) in January to 61.5°F in July, with an average annual temperature of 26.3°F. The record low temperature is –66°F, and the record high is 98°F. Average annual precipitation is 10.4 inches, most of which falls as rain during summer and early fall. Average annual snowfall is 67 inches, with a record high of 168 inches during the winter of 1970-71 (Natural Resources Branch 2001).

The Donnelly Training Area has the northern continental climate of the Alaskan Interior, characterized by short, moderate summers; long, cold winters, and little precipitation or humidity. Average monthly temperatures in Fairbanks range from –11.5° Fahrenheit (F) in January to 61.5°F in July, with an average annual temperature of 26.3°F. The record low temperature is –66°F, and the record high is 98°F. Average annual precipitation is 10.4 inches, most of which falls as rain during summer and early fall. Average annual snowfall is 67 inches, with a record high of 168 inches during the winter of 1970-71 (Natural Resources Branch 2001).

Background

Fort Wainwright's training lands fall within an area occupied at the time of Euro-American contact by Lower-Middle Tanana Athabascans, including 'bands' described generally as the Salcha, Big Delta-Goodpaster, Wood River and Chena Bands (McKenna 1981:564; Andrews 1975:177; Mishler 1986). Traditional settlement patterns were focused on a widely mobile seasonal round, with the fall caribou hunt playing a pivotal role in subsistence preparations for the winter, while summer activities were focused at fish camps and in berry/root collecting and sheep hunting (McKenna 1981: 565). These activities were frequently communal in focus, with several local 'bands' connected by common interest, geography and intermarriage. Despite anthropological attempts to define 'boundaries' for the peoples living in the lower Tanana River valley, natural terrain served as the only definable 'boundary' to settlement patterns (McKenna 1981).

As Euro-American traders, miners, missionaries and explorers moved into the Tanana River valley, the traditional lifestyle of local Athabaskan groups was disrupted. Access to trade goods and the development of the fur trade affected not only traditional material culture, but also began to dramatically affect subsistence activities and settlement patterns. Similarly, the advent of missionaries in the Interior of Alaska profoundly affected traditional social organization. The introduction of mission schools for Native children and the doctrine of new religious beliefs contributed to an erosion of traditional settlement patterns and practices (McKenna 1981).

After the discovery of gold in the Tanana uplands in 1898, a rush of Euro-American settlement to the Tanana valley began. As the economic importance of the Tanana valley increased, the need for reliable transportation routes and communication systems grew in tandem. Existing trails, such as the Bonfield, Donnelly-Washburn, and Valdez-Fairbanks trails saw increased use and development in the first decade of the 20th century. This activity also resulted in the establishment of several roadhouses and posts. In 1906, Congressional appropriations led to improvement of the Valdez-Fairbanks trail, crossing the Alaska Range south of Delta Junction, following the Tanana River to Fairbanks. Completion of the Alaska Railroad in 1923 was followed 20 years later by construction of the Alaska Highway in 1942, firmly tying the Alaskan Interior to the outside.

As Fairbanks grew in the first decade of the 20th century, several agricultural homesteads were developed on lands now encompassed by sections of the Fort Wainwright cantonment. These homesteads provided Fairbanks with a variety of agricultural products and wood for fuel, but

were subsumed when lands were withdrawn for the creation of Ladd Field, which later became Fort Wainwright (Price 2002).

Development in the Alaskan Interior increased dramatically with the advent of World War II and subsequent military build-up in Alaska. Of particular significance was the development of airfields near Delta Junction (Fort Greely), Fairbanks (Ladd Field, later Fort Wainwright), and 26 miles southeast of Fairbanks (Eielson Air Force Base). These locations began as lend-lease bases and cold weather testing centers, but soon expanded with the increased need for military support during World War II and later, the Cold War.

Archaeology

Archaeological research on Fort Wainwright's training areas has resulted in numerous technical reports (Bacon 1978; Bacon and Holmes 1979; Dixon et al. 1980; Frizzera 1973; Higgs et al. 1999; Holmes 1979; Potter et al. 2000; Rabich and Reger 1978; Staley 1993), scientific papers (West 1967, 1975), and the identification of at least 155 archaeological sites. Work on Fort Wainwright has been largely stratified sampling in nature, resulting at times in as little as 1 percent of the survey universe being inventoried. This work has largely focused on known recorded sites and areas thought to be of the very highest potential for containing archaeological sites. Areas of less than ideal site potential have often been neglected, and sites that may be eligible for nomination to the National Register have been incompletely documented or left unevaluated. Thus, while a large number of important sites have been identified on Fort Wainwright, a number of important gaps exist in the cultural resource inventory.

Despite its incomplete nature, the current archaeological record represents all of the recognized prehistoric cultures of the Alaskan Interior. Of particular significance is the role played by archaeological resources located on Army lands in the definition of the Denali Complex of the American Paleoarctic Tradition (Anderson 1970a; West 1967, 1981). Though not located on Army lands, two of the oldest well-dated sites in North America—Swan Point and Broken Mammoth, dated to between 11,500 and 12,000 before present (BP)—are located just to the north of Donnelly Training Area East (formerly known as Fort Greely, near Delta Junction), in the vicinity of Shaw Creek (Holmes 1996, 1998; Holmes et al. 1996; Yesner et al. 1999). Sites reflecting the influence of what has been termed the Northern Archaic Tradition (e.g. Anderson 1968; Workman 1978), dating to perhaps 6000 to 2000 BP, are also present on Fort Wainwright's training lands, as are late prehistoric Athabascan (e.g. Andrews 1975, 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978) and Euro-American historic archaeological sites (Gamza 1995; Phillips 1984). The potential significance of these known sites on Army Withdrawal Lands is attested to by the fact that nearly 50 of these sites remain to be evaluated, 27 individual sites and 3 archaeological districts have been determined eligible for listing in the National Register of Historic Places (NRHP), while a third archaeological district remains to be evaluated.

At Fort Wainwright's Tanana Flats Training Area, previous work has identified numerous archaeological deposits in the small rises of the Tanana Flats and those bordering the Tanana and Chena Rivers floodplains. In contrast, small lithic scatters have been sparsely documented throughout the Yukon Training Area (Holmes 1979). A possible explanation for this discrepancy is that sites have been destroyed by military activity in high probability locations (i.e. along ridgelines and on hilltops). It is also possible that this seeming lack of sites may reflect the low-intensity use of this rugged terrain. It is probable that human activity focused in areas near the Tanana, Salcha, Chena, and Wood Rivers, relying on access to high country further upstream, rather than traveling overland through the hills of YTA.

Historic Resources

Historic research dealing with Fort Wainwright includes recent historic context studies that deal with homesteading (Price 2002), early mining (Burr Neely 2001), and early transportation on Fort Wainwright (Burr Neely 2003). Although mining was perhaps the most important economic endeavor of the late 19th century and early 20th century in the Fort Wainwright area, only three archaeological sites associated with mining have been recorded on Army managed lands in Alaska (Burr Neely 2001:37). Several early transportation routes, roadhouses, and other structures associated with travel are known to exist in the vicinity of Fort Wainwright and Donnelly Training Area, including the Donnelly-Washburn and Bonnefield trails, for example (Burr Neely 2003). Military construction and training activities have also resulted in several potential site types, including downed aircraft, fighting positions, and training and target debris. The majority of these sites are difficult to assign to a specific context, and have often been consistently used for military training exercises; such sites have thus been determined ineligible for listing in the National Register of Historic Places (see above; Shaw 2000).